FEATHER FALLS POST-FIRE PROJECT

PALS# 59385

PROPOSED ACTION

Background The main attraction of the Feather Falls Scenic Area, also designated as a Special Interest Area, is Feather Falls, the sixth highest (640-feet) waterfall in the nation. The upper and lower sections of the Feather Falls National Recreation Trail lead to the fall overlook providing views of Feather Falls. The Feather Falls non-motorized trail offers incredible views of Bald Rock Dome, a large irregular mass of granite, and Bald Rock Canyon, a canyon of the Middle Fork of the Feather River.

There is an established campground at the trailhead, with five developed campsites, a water system, parking, toilets, and a day use area. The Feather Falls Trail is the most popular destination on the Feather River Ranger District, Plumas National Forest. The upper and lower trail sections pass through a diversity of habitats with unique plant and wildflower assemblages. In the spring hikers encounter a variety of wildflowers associated with mixed conifer forest or chaparral with granitic outcrops along both trail sections. Parts of this area were once inhabited by Maidu people and later by homesteaders. The presence of grinding rocks as well as occasional cultivated plant species is evidence that this area has long been utilized by humans.

The North Complex burned over Feather Falls Scenic Area including all 7.3 miles of the Feather Falls National Recreation Trail, 3 bridges, the scenic overlook, and all the recreation facilities located at the trailhead and campground. The Rapid Assessment of Vegetation Condition After Wildfire (RAVG) data augmented by site visits approximates 90 – 100 percent tree mortality across Feather Falls recreation infrastructure. Large numbers of fire killed, and fire injured trees are now hazards to people and facilities as well as constituting hazardous fuels.

Before reconstruction of facilities or reforestation and restoration activities can begin, hazard trees must be felled to protect designers, workers, and the public. Simply felling these hazards poses a hazardous fuels risk that must also be abated.

Proposed Project Location Feather Falls is located on the Fall River, a tributary of the Middle Fork Feather River, within the Plumas National Forest in Butte County, California. Mt. Diablo Meridian, T. 20N., R. 6E., Section 2; T. 21N., R 6E., Sections 26 and 35. See attached map.

Most of the approximate 7.3 miles of trail, 3 bridges, and the scenic overlook are within the Bald Rock Inventoried Roadless Area. Most of those trail miles are also within the Feather Falls Scenic Special Interest Area (map).

Proposed Project Action(s) and Description(s) The ultimate need was caused by the North Complex and the proposed activities of reconstruction, restoration, and reforestation would achieve desired conditions. Before personnel can safely design and implement reconstruction, restoration, and reforestation activities hazard trees must be abated.

Hazard tree abatement along Feather Falls Trail located within the Bald Rock Inventoried Roadless Area (IRA). This project proposes felling of hazard trees, removing by helicopter to process and deck, treating of slash to protect soils and facilitate decomposition.

- Removal of hazard trees using chainsaws or conventional ground logging equipment, along the ~ 7.3 miles of trail, to remove dead or dying trees, dead parts of live trees, or unstable trees that are likely to fail in the near future and are within striking distance of the trail, following Angwin et al. (2012). The potential failure zone of a tree on level ground is generally one to one and a half times the height of the tree. On sloping ground where the tree may slide or roll, the failure zone may need to be extended on the downhill side for whatever distance is necessary to protect people or property;
- Yarding use helicopters for slopes greater than 35 percent (most of the trail) and feller bunchers for slopes up to 35 percent (approximately 0.15 mile at the beginning of the trail) to carry felled hazard trees out of IRA for processing and decking; and
- Chipping of activity created fuels using a tracked chipper to broadcast chipped small trees, treetops, and slash back into the forest to rearrange fuels, stabilize soils, and accelerate decomposition.

Salvage logging and site prep for reforestation around recreation facilities outside the IRA. This project proposes to treat no more than 250 acres using conventional or mechanical tractor logging practices.

- Salvage Cut removing trees which are dead or dying fire killed trees, to recover economic value that would otherwise be lost. Salvage will be conducted following designation by damage class. Follow marking guidelines for fire-injured trees in California (Smith and Cluck 2011) with no green tree element. This includes the removal of all hazards to Feather Falls Campground and Trailhead and access along NFS Road 21N35Y. Sierra Nevada Forest Plan Amendment (SNFPA 2004) guidelines for snag retention apply;
- Mastication of brush and fire killed trees by crushing, mowing, mulching, or other treatment that grinds or shreds vegetation leaving resulting material on the forest floor, to enhance the success of natural regeneration or regeneration on sites that will be replanted; and
- The project will include maintenance to existing roads.

Reforestation to accomplish re-establishment of forest cover by hand-cut-and-pile brush, burn brush piles, plant trees in the ground, masticate brush, prune resprouting oaks, and dig fire-lines by hand.

- Hand-Cut trees and shrubs using chainsaws to enhance the success of natural regeneration or regeneration on sites that will be planted with native conifer seedlings;
- Yarding of activity-generated slash and other fuels from the site by carrying or dragging;
- Piling by Hand or Machine all activity generated slash and cover with waterproof covering for burning during winter months;
- Burning of Piled Material including hand and machine piles during winter months to remove hazardous fuels;
- Plant Trees to re-establish forest cover artificially by planting seedlings and/or cuttings, with or without site preparation;
- Establish Research Plots installed for research purposes by experimental stations, universities, or similar;
- Prune close to the branch collar or flush with stem, side branches and multiple leaders

from oak (or other hardwood) resprouts;
- Tree Release treatments designed to free young trees from undesirable, competing vegetation in stands not past sapling stage;
- Dig Fire Lines by Hand installing a control line that is scraped or dug to mineral soil;
- Apply Prescribed Fire to the majority or all of an area within well-defined boundaries for reduction of fuel hazard, as a resource management treatment, or both to achieve desired conditions; and
- Maintenance hand cutting, hand- and/or grapple-piling, mastication, biomassing, targeted grazing, and prescribed under-burning as needed on multiple entries over the next three years to maintain desired conditions.

Repair and/or replace recreation facilities of the Feather Falls Trailhead and Campground. This project proposes repairing and replacing roads, and minor facilities damaged or destroyed by fire.

- Repairs and improvements to NFS Road 21N35Y (Bryant Ravine Road);
    - Replace large campground and trailhead entrance sign
    - Install new gate
- Repairs to the paved parking lot;
    - Replace barrier – curb
    - Replace security lights
- Replace well water system with submersible pump
- Repair of Feather Falls Trailhead
    - Replace visitor information signs
- Repair of Feather Falls Campground consisting of 5 campsites;
    - Replace post-mounted registration box
    - Replace bear-proof garbage cans
    - Replace native material pathways
    - Replace wood steps to campsites
    - Install Carsonite markers at campsites
    - Replace fire rings
    - Install new concrete pads for picnic tables
    - Replace picnic tables
- Repair day use area; and
- Repair vault toilet building;

Reconstruction of the trail is not included among these projects because hazards need to be abated before it is safe to design and rebuild the trail, bridges, and scenic overlook. Until engineers are on the ground it is not known if segments of the trail (including stream crossings) might require rerouting.

Native American cultural resources have been recorded in the project area. Tribal consultation will be conducted, standard resource protection measures used, and appropriate design features integrated into the project to avoid impact on Native American cultural resources.

Purpose of Action The Chief of the Forest Service and the Pacific Southwest Regional Forester have stressed that the safety of the public and our employees is of central concern. In developed

recreation areas and within transportation corridors, hazard tree management is vital to everyone's safety. Trail maintenance includes removing danger trees that threaten safe use.

The January, 2004, Sierra Nevada Forest Plan Amendment provides for ecosystem restoration following catastrophic disturbance events through the salvage harvest of dead and dying trees conducted to recover the economic value of this material and to support objectives for reducing hazardous fuels, improving forest health, reintroducing fire, and/or reestablishing forested conditions.

Providing socioeconomic benefits, including the provision of a sustainable supply of timber, is part of the mandate of the USDA Forest Service. Providing adequate timber supplies contributes to the economic stability of rural communities in Sierra Nevada forests.

Need for Action The Rapid Assessment of Vegetation Condition After Wildfire (RAVG) program produces data estimating post-fire vegetation conditions on National Forest System (NFS) lands. RAVG data are produced by way of a multispectral change detection process using Landsat or other similar imagery. RAVG data augmented by site visits approximates 90% - 100% tree mortality in the Feather Falls area.

In areas where fire regimes and forest structure have been dramatically altered, there is increasing concern that contemporary fires have the potential to set forests on a positive feedback trajectory with successive reburns, one in which extensive stand replacing fire could promote more stand-replacing fire Coppoletta et al. (2016). Felling hazard trees at these levels of severe mortality necessitates removing the hazards to reduce the potential for severe wildland fire behavior.

Additional Information The proposed action is initially thought to fall within the Categorical Exclusions (CE) authorized and described in 36 CFR 220.6(d)(4): repair and maintenance of roads, trails, and landline boundaries; 36 CFR 220.6(e)(13): salvage of dead and/or dying trees; and 36 CFR 220.6(e)(11): post-fire rehabilitation activities.

The project is anticipated to have a decision in April 2021, signed by Christopher Carlton, Forest Supervisor, and implementation can begin immediately. Electronic comments and attachments are encouraged and must be submitted in one of the following formats: Microsoft Word (.doc or .docx), rich text format (.rtf), or Adobe portable document format (.pdf). Electronic comments should be submitted to: comments-pacificsouthwest-plumas-featherrvr@usda.gov with the subject "Feather Falls Hazard Tree Abatement Project".

For additional information please contact Clay Davis, District Planner, Feather River Ranger District at clay.davis@usda.gov; Herman Wendell, Resource Maintenance Team Leader, Plumas National Forest Westside, at herman.wendell@usda.gov; or Eric J. Murphy, Timber Management Officer, Feather River Ranger District at eric.j.murphy@usda.gov.